REMARKS

Claims 1-19 are pending in this application, with claims 5-12 withdrawn from consideration. No amendment is made in this Response.

Regarding restriction/election of species (Office action paragraphs no. 1-3)

In paragraph no. 1 of the Office action, the Examiner reviews the history of the restriction/election of species in the application. In paragraph no. 2, the Examiner states that in the Response to the restriction requirement dated January 6, 2005, Applicant traversed the restriction requirement "on the ground without explanation," and the restriction is made final.

Since the Examiner's wording "on the ground without explanation" was unclear, Applicant's agent, Daniel Geselowitz, telephoned the Examiner on March 28, 2005, regarding this, and the Examiner explained that this meant that Applicant had not given any grounds for our traversal. In response, Applicant's agent pointed out that Applicant did give arguments traversing the election requirement on page 3 of the Response to the restriction requirement. The Examiner then acknowledged that he had not noticed these arguments, and the Examiner indicated that Applicant should note this in the next response.

Applicant therefore respectfully requests consideration of the previously presented arguments traversing the restriction requirement.

Claims 1-4 and 16 are rejected under 35 U.S.C. §102(b)/(e) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Coates et al. (GB 2,271,771 or US 5,942,648) (Office action paragraph 6)

The rejection of claims 1-4 and 16 is respectfully traversed.

The Examiner cites compounds Ib-Ic, Ie-If, Ih, and IJ ([sic], should be Ij)-Im of the reference with regard to formula (I-3) of the present claims, and compounds In-Iq of the reference with regard to formula (I-1). These compounds are found in columns 5 and 6 of the reference (referring to the disclosure in Coates et al. '648).

The compounds Ib, Ic, Ie, If, Ih, and Ij correspond generally to formula (I-3) of the present claims, when k^1 and k^2 are 0 and when K^3 is a single bond. For Ij and Il, K^3 would be $-(CH_2)_2-$, and for Ik and Im, K^3 would be $-C\equiv C-$. Group R^1 of the reference is an alkyl or alkenyl, and would overlap R^1 in the present claims. Likewise, compounds In-Iq are consistent with formula (I-1) of claim 1, with group A^3 of formula (I-1) being 1,4-phenylene or 2-fluoro-1,4-phenylene.

The Examiner notes that Coates et al. discloses that the compounds can be used as liquid-crystalline media, and column 15, lines 30 and ff., indicate that the liquid-crystalline media preferably contain 2 to 40, 4 to 30, or 7 to 25 "components as further constituents **besides one or more of the compounds of the invention**" (emphasis added).

However, these "further constituents" are compounds **other** than the inventive naphthalene compounds, as disclosed in column 15, lines 35-57, and therefore the "2 to 40" disclosure is not relevant to the "two or more kinds of compounds" limitation of claim 1. The reference groups these

further constituents into two groups in column 16, line 63, to column17, line 2, but again these are **not** the inventive naphthalene compounds.

Although Coates does state that the media may contain "three, four or five compounds according to the invention" (column 17, line 12), the general disclosure of Coates does **not** anticipate claim 1, because there is no disclosure that the three, four or five compounds must be **any particular ones** of the listed compounds. Present claim 1, on the other hand, requires compounds of at least **two** of the recited general formulas (I-1) to (I-5). In addition, the Examples in Coates do not include a specific liquid-crystalline medium containing several inventive compounds. Therefore, the present claims are **not anticipated** under 35 U.S.C. 102(b).

In addition to the claims not being anticipated by Coates, Applicant further argues that this limitation of the claims is **not suggested** by Coates, and that the present claims are not obvious over the reference.

The reference states that "one or more compounds of the invention" in column 15, lines 32-33, and the Examiner refers to column 17, lines 7-14, which indicate that "the media preferably contain three, four or five compounds according to the invention."

The compound of formula (I-3) of the present invention includes the compounds of Ib-Ic, Ie-If, Ih and Ij-Im in Coates et al. The compound of formula (I-1) of the present invention includes the compounds of In-Iq.

However, as noted above, in the reference, there is no general disclosure about the **specific combination** of the recited compounds in claim 1 (see column 17, lines 6-12, of Coates). There is

no clear description in Coates of the combination of two or more kinds of compounds as recited in claim 1. The compounds groups corresponding to general formulas (I-1) to (I-5) of the present invention are not disclosed in Coates. Therefore, a composition including a particular combination of general formulas (I-1) to (I-5) of the present invention is **not suggested** at all.

In addition, as noted above, the Examples in Coates do not include plural naphthalene compounds. The Examples therefore do not suggest a composition that mixes the compounds of formulas Ib-Ic, Ie-If, Ih and Ij=Im with the compounds of formulas In-Iq.

In contrast, the present invention is a composition that combines (mixes) two or more specific compounds. The composition including the combination of the compounds of general formulas (I-1) to (I-5) defined by the present invention provides excellent liquid crystal characteristics.

Moreover, even if Coates were taken as providing a suggestion for the "two or more kinds of compounds represented by two or three or more general formulas" limitation of claim 1, Applicant submits that there are "unexpected results" arising from this limitation.

Applicant has previously argued along these lines in the Amendment dated September 24, 2004, in response to the rejection over Gray et al. (see page 39 of that Amendment). In support of the argument, Applicant presented a Declaration under 37 CFR 1.132 by Kyofumi Takeuchi, signed August 25, 2004. Applicant submits that the results in that Declaration are completely unexpected based on the teachings of Coates et al., and support Applicant's argument that the present invention, as claimed, has unexpected results over the reference.

In addition, Applicant herein attaches a new Declaration Under 37 C.F.R. 1.132, by Mr. Kyofumi Takeuchi, one of the inventors of the instant application, signed September 15, 2005. This Declaration provides additional data supporting the argument that the present invention has "unexpected results" over Coates.

As disclosed in the new Declaration, the composition of Example A is a composition including a combination of two compounds represented by general formulas (I-1) and (I-3). The composition of Example A is therefore a composition of the present invention (claim 1). On the other hand, the composition of Comparative Example A is a composition including two compounds represented by general formula (I-3). The composition of Comparative Example A is not a composition of the present invention, but would be consistent with a composition (including Ij and Ic) described in Coates.

As can be seen in the data in the Declaration, the liquid crystal phase-isotropic liquid phase transition temperature of the composition of Example A is clearly higher than the liquid crystal phase-isotropic liquid phase transition temperature of composition of Comparative Example A. Moreover, its threshold voltage (V) is lower compared with the composition of Comparative Example A. The composition of Example A is much better than the composition of Comparative Example A as a liquid crystal composition.

Applicant submits that this result is commensurate in scope with claim 1, and is clearly unexpected over Coates. Applicant therefore submits that claims 1-4 and 16 are not anticipated by, and are not obvious over, Coates et al. (GB 2,271,771 or US 5,942,648).

Claims 13-15 and 17-18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Coates abovementioned. (Office action paragraph 7)

The rejection of claims 13-15 and 17-18 is respectfully traversed.

Applicant has argued above that base claim 1 is not anticipated by, and is not obvious over, Coates. The arguments presented above are applicable to dependent claims 13-15 and 17-18.

Claim 19 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 6,746,728. (Office action paragraph 9)

The rejection is obviated by the filing of a terminal disclaimer over U.S. Patent No. 6,746,728. The terminal disclaimer papers accompany this Response.

It is noted that the claimed subject matter of the present invention and US 2003/0,222,244 overlaps [sic] each other. Therefore, there is a potential interference with US '244 if the present claims are found allowable. (Office action paragraph no. 11).

Applicant acknowledges that no interference has been declared at this time.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS,
HANSON & BROOKS, LLP

Daniel A. Geselowitz, Ph.D.
Agent for Applicant
Reg. No. 42,573

DAG/nrp
Atty. Docket No. **010347**
Suite 1000
1725 K Street, N.W.
Washington, D.C. 20006
(202) 659-2930

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Enclosure: Declaration Pursuant to 37 C.F.R. 1.132

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